

MARYLAND DEPARTMENT OF THE ENVIRONMENT

Land Management Administration • Resource Management Program

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Composting Facility Operations Plan Checklist

The following checklist is provided as guidance to assist operators of proposed composting facilities in preparing the Composting Facility Operations Plan (CFOP) required under COMAR 26.04.11.09B(1). This checklist is for informational purposes only. Please consult the regulations and permit for full requirements.

To assist in timely processing of Notices of Intent to operate under the General Composting Facility Permit, the Maryland Department of the Environment (the Department) recommends that CFOPs include the following items as section headings in the order in which they appear below. For any questions regarding this checklist or the CFOP requirement, please contact the Resource Management Program at (410)-537-3314.

A. Facility Contact Information

<input type="checkbox"/>	Facility name
<input type="checkbox"/>	Operator name, e-mail address, and emergency contact telephone number
<input type="checkbox"/>	Facility address, including county name
<input type="checkbox"/>	Facility telephone number
<input type="checkbox"/>	Listing of facility personnel that hold a composting operator certification issued by Maryland Department of Agriculture
<input type="checkbox"/>	Facility operating hours

B. Description of Methods, Equipment, and Feedstocks to be Used

<input type="checkbox"/>	List of feedstocks to be accepted
<input type="checkbox"/>	Composting method <i>Examples: windrows, aerated static piles, in-vessel composting. Indicate the method of aeration.</i>
<input type="checkbox"/>	Equipment to be used on site <i>Examples: equipment for pile formation and turning, shredding, grinding, screening, and bagging.</i>

C. Basic Facility Design and Capacity

<input type="checkbox"/>	<p>Description of the movement of materials throughout the composting process.</p> <p><i>This may be provided in the form of a process flow diagram or a brief narrative description of the phases of the process, from receipt of incoming material through storage and disposition of the finished compost and storage and removal of any residual solid waste. Please include the estimated residence time of material in each stage of the process.</i></p>
<input type="checkbox"/>	<p>Locations to be used at the composting facility for feedstock receipt, active composting, curing, and storage phases.</p> <p><i>Include a drawing of the facility, showing the areas used for each phase of the composting process. Also include the area where residual solid waste will be stored prior to removal.</i></p>
<input type="checkbox"/>	<p>Maximum capacity and annual throughput for the composting facility</p> <p><i>Please provide:</i></p> <p><i>(1) The maximum quantity of feedstocks to be accepted in one year, and</i></p> <p><i>(2) The maximum quantity of finished compost to be produced in one year. For Tier 2 facilities, the maximum quantity of finished compost must be provided in cubic yards. All other amounts may be provided in either tons or cubic yards.</i></p>
<input type="checkbox"/>	<p>Maximum height, width, and spacing of piles</p> <p><i>Include the maximum heights and widths and the minimum spacing for raw feedstock, active composting, curing, and finished compost piles. Reference any applicable State or local requirements that limit pile size and placement, including COMAR 29.06.01.08.</i></p>

D. Methods and Plans for Meeting Performance Standards

<input type="checkbox"/>	<p>Plan to prevent creation of nuisances, including nuisance odors, litter, and dust and to respond to complaints.</p> <p><i>Include methods and procedures to prevent and control odors and other potential nuisance conditions at the facility, as well as a complaint response protocol.</i></p>
<input type="checkbox"/>	<p>Screening from adjoining properties.</p> <p><i>Specify whether the facility will be enclosed or visually screened from adjoining properties. If not, include a statement confirming that local law does not require screening, and a description of the other design or operational controls that will adequately prevent noise, dust, odors, and blowing debris in the absence of screening.</i></p>
<input type="checkbox"/>	<p>Plan to prevent harborage and infestation of disease vectors, including rodents</p>

	<i>Include any methods to prevent harborage and infestation of flies, rodents, and other scavengers.</i>
<input type="checkbox"/>	<p>Description of methods used to control contact water and stormwater</p> <p><i>For Tier 2 Large facilities, this must include a description of the low-permeability pad and the system for collection and containment of contact water.</i></p>
<input type="checkbox"/>	<p>Emergency preparedness plan for responding to and minimizing the occurrence of fires and other emergencies</p> <p><i>Include the following:</i></p> <p><i>A list of names and telephone numbers of the persons to contact in the event of a fire, flood, or other emergency involving the facility;</i></p> <p><i>A list of emergency response equipment present at the facility or available for use at the facility, the location of the equipment, and how the equipment will be used in the event of a fire or other emergency;</i></p> <p><i>The procedures facility personnel will follow from discovery of an emergency until the situation is corrected, including the measures to minimize the occurrence, recurrence, or spread of fires and releases;</i></p> <p><i>The location of known water supplies, fire hydrants, dry chemical extinguishers, or other materials that may be used for firefighting purposes;</i></p> <p><i>Provision for reporting emergency situations to the Department without delay; and</i></p> <p><i>Provision for familiarizing all employees with the requirements of the emergency preparedness plan.</i></p>

E. Monitoring and Quality Control

<input type="checkbox"/>	<p>Plan and procedure for monitoring temperature</p> <p><i>The temperature monitoring plan must provide for monitoring of each windrow or pile, including a procedure for demonstrating that pathogen reduction requirements are met. During the period used to meet pathogen reduction requirements, the plan should include temperature monitoring at least once daily. The plan must also include a maximum temperature above which the operator will intervene to cool the pile or windrow (e.g. by turning or other aeration, addition of water).</i></p>
<input type="checkbox"/>	<p>Plan and procedure for measuring moisture during composting</p> <p><i>Include the optimal moisture range that will be targeted for active compost, procedures that will be implemented to ensure the correct moisture content when forming piles, and procedures to add moisture in the event that the pile or windrow becomes too dry during composting.</i></p>
<input type="checkbox"/>	<p>Plan and procedure for reducing vector attraction [TIER 2 ONLY]</p> <p><i>This may include the vector attraction reduction method in 40 CFR §503.33(b)(5) or</i></p>

	<i>an alternative method, which may include a time and temperature combination or other management control.</i>
<input type="checkbox"/>	<p>Description of methods for handling unacceptable wastes delivered to the composting facility</p> <p><i>Include procedures for visually inspecting each incoming load to assess the estimated portion of unauthorized material in the load;</i></p> <p><i>Include procedures for notifying the hauler or generator of the feedstocks if significant quantities of unauthorized materials are observed;</i></p> <p><i>Establish a de minimis quantity of unauthorized materials in a load, above which the load will be rejected. The Department recommends a threshold of no greater than 10% contaminants per load. In setting the threshold, consider the process of removing unauthorized materials from finished compost to ensure quality standards are met, as well as the facility's capacity to properly manage unauthorized materials prior to disposal.</i></p> <p><i>Describe procedures for preventing, identifying, segregating, handling, storing, and recycling or disposing of unauthorized material.</i></p>
<input type="checkbox"/>	Plan for determining whether the product is stable, meets pathogen reduction requirements, and is suitable for placement in the curing or compost storage area [TIER 2 ONLY]
<input type="checkbox"/>	Plan for disposal of product that does not meet quality or regulatory requirements
<input type="checkbox"/>	Plan for keeping of records required under COMAR 26.04.11.12

F. Maintenance, Inspection, and Safety

<input type="checkbox"/>	<p>Plan for periodic inspection of the site by the facility operator or personnel</p> <p><i>Include procedures for inspection of the pad and any stormwater and contact water control measures.</i></p>
<input type="checkbox"/>	Plan for periodic cleaning and maintenance
<input type="checkbox"/>	Methods used to prevent mud, soil, and debris from the composting facility from entering public roadways and a procedure for cleaning roads if necessary
<input type="checkbox"/>	Description of employee safety training
<input type="checkbox"/>	Description of procedures for recording and reporting instances of noncompliance at the facility